ULTRASONIC INSPECTION DEVICE

Publication number: JP11118775 (A)

Publication date: 1999-04-30

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Classification:

- international: *G01B17/00; G01B17/06; G01N29/22; G01N29/44;* G01B17/00; G01B17/06; G01N29/22; G01N29/44; (IPC1-7): G01N29/22; G01B17/00
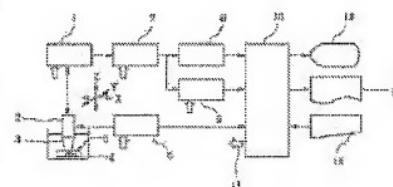
- European:

Application number: JP19970291813 19971009

Priority number(s): JP19970291813 19971009

Abstract of **JP 11118775 (A)**

PROBLEM TO BE SOLVED: To automate an inspection process by extracting the shape of an object with the internal reflection echoes of an object to be inspected and calculating an area, calculating the ratio of a defective area in the object to the area of the object, and automatically judging whether the object is defective or not. SOLUTION: An ultrasonic transducer 2 that places an object 5 to be inspected in a water bath and transmits and receives ultrasonic pulses to and from the object 5, scans the object 5 by a scanner 6. Ultrasonic beams 3 control the Z position of the scanner 6 by a control signal 1 from a system controller 10 so that a focusing point 4 is located at the part of a defect 15 to be inspected in the object 5. A signal within the set time by a control signal 11 is outputted by a gate circuit 7 and is inputted to a peak holder 9 for detecting signal intensity and a time counter 8 for detecting depth. In the controller 10, the depth of a reflection point is calculated from a sound speed being set to the counter 8 and an input device 14 with the signal of the holder 9 as a signal intensity, information on the signal intensity, the depth, and a position can be displayed, thus automatically judging a defect and hence automating an ultrasonic non- destructive inspection process.